STATE OF VERMONT PUBLIC SERVICE BOARD

Docket No. 6911

Petition of EMDC, LLC, d/b/a East Haven Windfarm, for a certificate of public good, pursuant to 30 V.S.A. Section 231 and 248, authorizing it to construct and operate a 6 MW wind electric generation facility, and associated transmission and interconnection facilities, in East Haven, Vermont

PREFILED TESTIMONY OF DAVID F. LAMONT

ON BEHALF OF THE VERMONT DEPARTMENT OF PUBLIC SERVICE

December 15, 2004

<u>Summary</u>: The purpose of Mr. Lamont's testimony is to provide the Department's comments

on a number of criteria under 30 V.S.A. § 248(b) and to briefly discuss the issue

of ice throw and safety around the proposed project site.

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Prefiled Testimony of David F. Lamont

1	Q.	Please state your name and occupation.
2	A.	My name is David F. Lamont, and I am a Power Supply Planner for the Vermont
3		Department of Public Service ("Department" or "DPS"). My business address is 112
4		State Street, Montpelier, Vermont.
5	Q.	Please summarize your professional background and experience.
6	A.	I have worked for the Department since 1986 in various capacities, both as a DSM
7		analyst and in my present position as a Power Supply Planner. Prior to that, I worked for
8		the Vermont State Energy Office where I was involved in numerous energy efficiency
9		programs and in reviewing the energy efficiency of new construction under Act 250.
10	Q.	Have you ever testified before the Vermont Public Service Board before?
11	A.	I have testified in Docket Nos. 5270, 5329, 5370, 5428, 5483, 5491, 5533,
12		5630/5632, 5656, 5695, 5810/5811/5812, 5823, 5828, 5857, 5859, 5863, 5983, 6043,
13		6107, 6545 and others as well as before the District Environmental Commissions and the
14		Environmental Board in numerous Act 250 cases.
15	Q.	What is the purpose of your testimony?
16	A.	I will be offering comments on behalf of the Department on the following criteria
17		under 30 V.S.A. § 248(b):
18		(2) whether the proposed project is required to meet the need for present and future
19		demand for service which could not otherwise be provided in a more cost effective
20		manner through energy conservation programs and measures and energy-efficiency and

load management measures, including but not limited to those developed pursuant to the provisions of sections 209(d), 218c, and 218(b) of Title 30;

- (4) whether the proposed project will result in an economic benefit to the state and its residents; and,
- (7) whether the proposed project is in compliance with the electric energy plan approved by the Department under section 202 of Title 30, or that there exists good cause to permit the proposed action.

I will also provide some comment on the issue of ice throw from the turbine blades and related safety issues with respect to use of the lands surrounding the project site.

30 V.S.A. § 248(b)(2)

A.

Q. Is the project required to meet the need for present or future demand for electric energy?

Yes. Many states, including some in New England, have established various types of programs designed to encourage the development of renewable energy sources. It is their belief that renewable energy offers benefits which exceed the incentives offered to developers of renewable projects. These incentives are paid to developers of qualifying renewable energy projects through the sale of Renewable Energy Certificates ("REC"'s). Entities serving load in any of these states are required to have a specified portion of their load served with renewable energy. Ownership of REC's is the vehicle to meet that requirement.

REC's are traded bilaterally or through brokers. Currently prices for REC's are very high - often equal to the cap price set by the states in their renewable portfolio standards legislation. This indicates to me that the demand for renewable power is currently exceeding the ability of the marketplace to produce it. The proposed project would help meet that demand.

Additionally, this project will displace fossil fuel generation. In New England, the marginal energy source is fossil fuel (natural gas, coal or oil). The fossil fuel displaced by this project will be available to generate electricity in the future or be diverted to another use.

30 V.S.A. § 248(b)(4)

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- Q. Will the project result in an economic benefit for the State of Vermont?
 - A. Yes, in several ways. The nature of the contract with Lyndonville Electric Department ("LED") virtually assures that LED ratepayers will see economic benefit from this generation source. LED will purchase the power from EMDC at 95% of the clearing price at the Burke Mountain substation. LED will then be able to immediately sell it into the ISO-New England market for 100% of the clearing price, thereby guaranteeing a 5% profit on the transaction. In addition, LED will receive a portion of the Renewable Energy Certificates generated by the project. These certificates have value and may be resold to load serving entities with requirements to meet their load through renewable resources. LED has no risk in undertaking this contract.
- Q. Are there other benefits to the project?
- 17 A. Yes. There are annual property tax revenues which accrue to the State as well as
 18 to the town of East Haven. There are some short and long term employment benefits
 19 which flow to the region. Additional generation in the regional mix will result in a slight
 20 lowering of the Locational Marginal Price ("LMP"), thereby benefitting all ratepayers in
 21 New England. This effect will likely be more pronounced closer to the project, meaning
 22 that Vermont ratepayers should receive most of these benefits.
- Q. Do you have any additional comments on the nature of the power contract between LED and EMDC?

1 Α. Yes. I am somewhat disappointed in the terms of the contract between LED and 2 EMDC. By indexing the price of the power to the market price, (or in the case of LED, 3 the amount of the credit) both the developer and LED have dismissed one of the major benefits of renewable energy and that is price certainty. A fixed price contract would 4 seem to have benefits for both the utility and the developer. Since, barring unforseen 5 6 O&M expenses, the costs to the developer should be well known and constant. Utility 7 ratepayers would benefit since a portion of their power costs would be known and at a fixed price. 8

30 V.S.A. § 248(b)(7)

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- Q. Is the project consistent with the 20 year Electric Plan?
- 11 A. Yes. There are numerous references in the plan citing the benefits and desirability 12 of renewable generation sources.¹ The plan discusses the necessity of looking at the long 13 term benefits derived from renewable energy and not just the short term costs.

On December 13, 2004, the Department issued a determination under 30 V.S.A. § 202(f) finding that the proposed project is consistent with the Electric Plan provided that EMDC's actions are consistent with those described in its petition.

Ice Throw and Safety Around the Project Site

- Q. Have you examined the ice throw issue?
- A. Yes. Given the elevation of the proposed turbines, it is likely that, under certain meteorological conditions ice will form on the blades, tower and generator housing of the turbine. While I can't say that there is no danger from ice throw, I have been to the area and it is very remote and difficult to move through. For an accident to occur, there would have to be a "Perfect Storm" type of event meteorological conditions which lead to ice

¹ See generally, Vermont 20 Year Electric Plan, Chapters 4 and 7

formation, an individual present, and the ice would then have to be thrown on the correct trajectory. Given the remoteness of the area, this seems highly unlikely. One study I looked at concluded that if 15,000 persons pass a road close to a wind turbine per year, there might be one accident in 300 years from ice throw.² Even if this estimate were in error by an order of magnitude, it still represents a very minor risk.

This type of risk is similar to risks taken with other types of electricity production and delivery systems. To enable the enjoyment of the benefits of a reliable electric supply, we tolerate emissions from power plants which have documented health effects on those downwind. We tolerate energized power lines running throughout our cities and towns. We tolerate the risks of nuclear power production. The risks to public health and safety from this project are comparable to these other risks attributable to alternate power supply sources.

Further, there is a public safety benefit to be gained from dismantling the existing structures at the summit of the mountain. The structures are in such a state of disrepair that they could fail at any time, potentially causing harm to an individual in the area.

- Q. Does that conclude your testimony?
- 17 A. Yes, it does.

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² Risk Analysis of Ice Throw from Wind Turbines, Henry Seifert, et al., Paper presented at BOREAS 6, April 2003, Pyha, Finland at 8.